Antimicrobial Susceptibility Report

January 1, 2017 to December 31, 2017

Hamilton Niagara Haldimand Brant LTC (Excluding Hospitals)

Urinary Tract Pathogens (in Order of Frequency) - % Susceptible

Organism	Number of Isolates	Amox clavulanic	Ampicillin	Cefazolin (1)	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem	Nitrofurantoin	Trimethoprim-Sulfamethoxazole
E. coli ^	2268	87	44	76		85	51	89	100	93	68
Enterococcus species ^^^^	665										
Klebsiella pneumoniae *	509	98		92		94	92	97	100	38	86
Proteus mirabilis +	388	97	76	90		97	69	94	100		61
Pseudomonas aeruginosa	151				93		75	84			
Group B Streptococcus ^^	112										

Organism Notes:

* Includes ESBL and AMP-C isolates (5.5% of total Klebsiella pneumoniae isolates identified as ESBL and AMP-C).

^ Includes ESBL and AMP-C isolates (14.9% of total E.coli isolates identified as ESBL and AMP-C). In Ontario, E.coli is found to be 98.1% susceptible to Fosfomycin.

^^ This isolate is predictably susceptible to Penicillin.

^^^^ Clindamycin, Trimethoprim/Sulfamethoxazole and all Cephalosporins are ineffective against Enterococcus species. Enterococcus isolates recovered from urine are generally susceptible to amoxicillin and nitrofurantoin. Susceptibility to Amoxicillin is 97.1% and to Nitrofurantoin is 97.4%

+ Includes ESBL and AMP-C isolates (0.0% of total Proteus mirabilis isolates identified as ESBL and AMP-C).

Antibiotic Notes:

(1) Cefazolin interpretation predicts results for Cephalexin (Keflex) in accordance with CLSI standards for urinary sites only (not systemic).

All Other Specimen Types excluding (Urines and Surveillance) - Organisms in Order of Frequency - % Susceptible

Organism	Number of Isolates	Cefazolin	Ceftazidime	Ciprofloxacin	Clindamycin	Cloxacillin	Erythromycin	Gentamicin	Tetracycline (2)	Trimethoprim-Sulfamethoxazole
Staphylococcus aureus ^^^	656	60			42	60	36		94	99
Pseudomonas aeruginosa	262		92	82				90		
Group B Streptococcus ^^	45									

Organism Notes:

^^ This isolate is predictably susceptible to Penicillin.

^^^ Includes Methicillin Resistant S.aureus (MRSA). MRSA is resistant to all B-Lactams (penicillins, cephalosporins, B-lactam/B-lactamase inhibitor combinations, and carbapenems). MRSA constitutes 39.5% of total Staphylococcus aureus isolates identified.

Antibiotic Notes:

(2) Organisms that are susceptible to Tetracycline are also considered susceptible to Doxycycline.

General Notes:

Antibiogram results, patient risk factors for resistant organisms, and resistance epidemiology should be considered together to help guide empiric treatment of initial infections. Treatment should be re-evaluated as additional information from culture and sensitivity become available.

Calculation of results based on first isolate per patient.

- 90-100% of isolates are susceptible to the antibiotic indicated (GOOD CHOICE)
- 21-89% of isolates are susceptible to the antibiotic indicated (INTERMEDIATE CHOICE)
- 0-20% of isolates are susceptible to the antibiotic indicated (POOR CHOICE)
- Value based on < 30 isolates. Statistical comparison on results with less than 30 isolates is unreliable. n = # of isolates tested.
- Antibiotic susceptibility testing is not typically performed on the organism.